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Title: Permitting Threshold for Silk Screen Printing

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Approved by:

Author: Lucinda Swann

Marioa Soons

Lucinda Swann, Permit Engineering Division Manager

## I. Purpose

The purpose of this technical guidance is to set permitting thresholds for screen printing where no dryers or ovens are used.

## II. Definitions

Screen Printing – A process of passing printing ink through a screen (a taut web or fabric) to make an imprint on a substrate. A refined form of stencil has been applied to the screen such that the stencil openings determine the form and dimensions of the imprint. (Rule 337§228)

## III. Guidance

Use Rule  $200\S303.3(c)(7)(j)$  to determine if a screen printing operation will require a permit. If a source's emissions exceed the levels in this rule provision, the screen printing operation will require a permit. Rule  $200\S303.3(c)(7)(j)$  reads:

A source whose aggregate of all miscellaneous equipment, processes or production lines not otherwise identified in this section has total uncontrolled emissions of less than three pounds (1.4 kg) VOC or PM10 during any day and less than 5.5 pounds (2.5 kg) of any other regulated air pollutant during any day.

## IV. Discussion

Rule 200§303.3(c)(3)(d) exempts printing presses with a maximum of 500 square inches of impression area and a maximum of two units per press. In 1993, Printing Industries of Arizona recommended this exemption which they developed based on a correlation of press impression area with emissions from offset lithography practices and materials in use at that time. However, this exemption does not fit well with the nature of screen printing where the size of the impression area can vary depending on the substrate (e.g. wallet to banners). Since screen printing operations do not have fixed imprint areas, a company that is only printing on many wallet sized objects may emit more than a company that is printing on a few banner sized objects. Without a direct correlation between impression area and emissions, a permitting threshold based on the generic emissions cut-point exemption in Rule 200§303.3(c)(7)(j) provides a more appropriate characterization of the emissions potential of screen printing operations.